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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/724,606  
Filing Date: November 28, 2000  
Appellant(s): BURLEIGH ET AL.

**MAILED**

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Gene L. Tyler  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed April 27, 2007 appealing from the Office  
action mailed July 3, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,893,079	CWENAR	4-1999
5,475,589	ARMITAGE	12-1995
5,148,365	DEMBO	9-1992
6,484,151	OSHAUGHNESSY	11-2002

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6,373,489	LU	4-2002
6,341,291	BENTLEY	1-2002
6,959,268	MYERS	10-2005
2005/0108139 A1	SPERANDEO	5-2005

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 15-27 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cwenar (U. S. Patent no. 5,893,079) of record in view of Armitage (U. S. Patent no. 5,475,589) of record.

Regarding claims 1 and 21-22, Cwenar discloses at (FIG. 4) an information management system, comprising:

- a data repository (101, Fig. 4, Cwenar) storing portfolio data tied to a key parameter field (FIG. 6; col. 7, lines 21-27 and col. 13, lines 19-60, Cwenar); and
- at least one application server (100) adapted to provide a plurality of applications (column 6, lines 36-39) to a plurality of users (126, 128, 130, 132, 134, 136, 138 and 140), the at least one application server (100) operatively coupled to the data repository (101), each of the applications adapted to generate at least some data

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having the key parameter field (col.7, lines 21-36, Cwenar), the at least one application server (101) adapted to retrieve and update (column 5, lines 47-54 and column 6, lines 10-14, Cwenar) selected ones of the related data when ones of the applications use and generate application data having the key parameter field (see column 6, line 66 to column 7, line 3 and lines 21-36; abstract and FIG. 6 of Cwenar), the management system further updating data relating to a property in real time environment based on input from multiple users using different programs for different tasks (col.5, lines 44-63; col.6, lines 36-44 and col. 8, lines 46-58, Cwenar).

Cwenar, however, does not disclose that the data in the database pertains to related hydrocarbon-producing portfolio data, the steps above could be used with databases storing any kind of data, to include hydrocarbon-producing portfolio data. Furthermore, the type of data being stored and updated in the databases does not affect the storing, retrieving, or updating steps commonly used by database management systems. Armitage, on the other hand, discloses system for evaluating seismic sequence lithology and property with predicting potential hydrocarbon reservoir and hydrocarbon data (col. 4, lines 57-66; col. 5, lines 7-14 and col.7, lines 44-46, Armitage). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use Cwenar's information management system with Armitage's hydrocarbon-producing data or any kind of data. One would have been motivated to use this type of system with hydrocarbon-producing portfolio data in order to maintain an up-to-date database for this area.

Regarding claim 2, Cwenar/Armitage combination further discloses the system wherein the data repository is adapted to store all data generated by each of the applications (see col.8, lines 46-50, Cwenar).

Regarding claim 3, Cwenar/Armitage combination further discloses the system wherein the data repository comprises a plurality of databases each adapted to store data from a respective one of the plurality of applications (see col.14, lines 11-16, Cwenar).

Regarding claims 4 and 24, Cwenar/Armitage combination discloses that the related data are relevant to a hydrocarbon-producing portfolio (see col. 4, lines 57-66; col. 5, lines 7-14 and col.7, lines 44-46, Armitage).

Regarding claim 5, Cwenar/Armitage combination further discloses the system wherein the plurality of applications comprises at least one selected from the group of a database management application, a portfolio management application, and a portfolio forecast application (see col.7, lines 7-20, Cwenar).

Regarding claim 6, Cwenar/Armitage combination further discloses at (Fig. 1 and Fig. 6) that the database management application comprises a front-end user interface (2, Fig. 1) operatively coupled to the data repository (4, Fig.1) and adapted to generate at least some data having the key parameter field when ones of the plurality of users enter data into the front-end user interface (Fig. 6, Cwenar).

Regarding claim 7, Cwenar/Armitage combination further discloses the system at (FIG. 1 of Cwenar) wherein the front-end user interface (2) comprises a plurality of different application modules each directed to specific ones of the plurality of users (elements 22, 24, 26 and 28, Cwenar).

Regarding claims 15 and 19-20, Cwenar discloses a management system (FIG. 4) for a hydrocarbon-producing portfolio, comprising:

- at least one server (100, Fig.4, Cwenar) adapted to serve a plurality of applications (column 6, line39) to respective users (126, 128, 130, 132, 134, 136, 138 and 140), each of the applications adapted to generate data corresponding to the respective user, at least some of the data generated by each application having a key parameter field (101, FIG. 4 and FIG. 6; col. 7, lines 21-27 and col. 13, lines 19-39, Cwenar) therein;
- a database management system (101, Fig.4, Cwenar) operatively coupled to the at least one server (100, Fig.4, Cwenar) and adapted to store at least some of the data generated by each application and update any of the stored data having the key parameter field when ones of the applications modify any of the stored data having the key parameter field (see column 6, line 66 to column 7, line 3 and lines 24-25; abstract and FIG. 6 of Cwenar);
- the at least one server adapted to serve the updated data to any other ones of the applications when the other ones of the applications retrieves the updated data having the key parameter field (column 5, lines 50-52; column 6, line 66 to column 7, line 3 and lines 24-25). The at least one business process model application adapted to automatically update the modeled data when any ones of the selected ones of the stored data are updated by operation of any of the other applications (see col.5, lines 47-54 and col.6, lines 10-14, Cwenar).

Cwenar, however, does not disclose the related hydrocarbon-producing portfolio data.

Armitage, on the other hand, discloses system for evaluating seismic sequence lithology and

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property with predicting potential hydrocarbon reservoir and hydrocarbon data (col. 4, lines 57-66; col. 5, lines 7-14 and col.7, lines 44-46, Armitage). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use Cwenar's information management system with Armitage's hydrocarbon-producing data or any kind of data. One would have been motivated to use this type of system with hydrocarbon-producing portfolio data in order to maintain an up-to-date database for this area.

Regarding claims 16-18 and 26-27, Cwenar/Armitage combination further discloses that the business process model comprises creating an optimized drilling schedule (col.11, lines 48-58, Armitage).

Regarding claim 23, Cwenar/Armitage combination further discloses that a parent application comprising a plurality of application modules, each of the application modules directed to at least one of the respective users (see col.7, lines 57-64, Cwenar).

Regarding claim 25, Cwenar/Armitage combination further discloses that applying at least one business process model to selected ones of the stored data to generate modeled data; and automatically updating the modeled data when selected ones of the stored data are updated by operation of any one of the served applications (see col.5, lines 47-54 and col.6, lines 10-14, Cwenar).

Regarding claim 41, Cwenar/Armitage combination further discloses the application server provides data generated by one of the plurality of different applications as input to another of the plurality of different applications (col. 3, lines 13-40, the data of Armitage's system collected from the different programs).



Claims 8-10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cwenar (U. S. Patent no. 5,893,079) or record in view of Armitage (U. S. Patent no. 5,475,589) of record and further view of Dembo (U. S. Patent no. 5,148,365).

Regarding claim 8, Cwenar/Armitage combination discloses all claimed limitations as discussed above, except a resources optimization program adapted to use the related data retrieved from the data repository to generate an optimized allocation of resources based on at least one selected criterion. Dembo, however, discloses generating an optimized allocation of resources (see FIG. 1 and column 1, lines 33-35 and 39-45, Dembo). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cwenar/Armitage to include the claimed feature as taught by Dembo. The motivation of doing so would have been to use the system of Cwenar for optimally allocating available resources in portfolio management system (col.1, 4-7, Demo).

Regarding claim 9, Cwenar/Armitage/Dembo combination further discloses the system wherein the selected criterion comprises at least one selected from the group of developing most profitable assets first, achieving a selected net cash flow, achieving a selected earnings, achieving a selected level of production, satisfying obligations on time, and developing assets to achieve the greatest net cash flow in a selected amount of time for a selected amount of capital (see FIG. 5a-d and col.1, lines 43-49, Dembo).

Regarding claim 10, Cwenar/Armitage/Dembo combination further discloses the system wherein the applications server is adapted to automatically update selected ones of the related data when the resource optimization program generates optimized allocation of resources data (see col.8, lines 27-37, Dembo).

Regarding claim 11, Cwenar/Armitage/Dembo combination discloses the forecast application couple to predict future performance of assets (see col.8, line26 to col.9, line 4 and col. 10, lines 10-17, Dembo). Therefore, the combination system discloses the portfolio forecast application is adapted to forecast future performance of assets based on the related data.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cwenar (U. S. Patent no. 5,893,079) in view of Armitage (U. S. Patent no. 5,475,589) and further in view of O'Shaughnessy (U. S. Patent no. 6,484,151).

Regarding claim 12, Cwenar/Armitage combination discloses all of the claimed limitation as discussed above, except "the automatically notification at least one user when related data relevant to the at least one user has been updated in the data repository". O'Shaughnessy, however, discloses automatically notifying the user when related data has been updated (Summary of O'Shaughnessy). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cwenar/Armitage to include the claimed feature as taught by O'Shaughnessy. The motivation of doing so would have been to transmit the updated information to the users immediately.

Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cwenar (U. S. Patent no. 5,893,079) in view of Armitage (U. S. Patent no. 5,475,589) and further view of Lu et al. (U. S. Patent no. 6,373,489).

Regarding claims 13-14, Cwenar/Armitage combination discloses all of the claimed limitation as discussed above, except the members of an asset development team having different functions related to the development and management of assets in the portfolio, each member responsible for providing particular related data corresponding thereto. Lu, however, discloses

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different functions related to the development and management of assets (col. 1, lines 14-21, Lu).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cwenar/Armitage to include the claimed feature as taught by Lu to provide various specialists having different functions related to the management of assets. The motivation of doing so would have been to enhance the management system.

Claim 28-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bentley et al. (U. S. Patent no. 6,341,291) of record in view of Armitage (U. S. Patent no. 5,475,589) of record and further in view of Sperandeo (US Pub. 2005/0108139 A1).

Regarding claim 28, Bentley discloses a method for managing a portfolio, comprising:  
having a plurality of asset team members each using an application related to a function of the respective asset team member to generate data; the asset team members (see col. 5, lines 44-63, Bentley) comprising engineers (see col. 5, lines 44-50 and col. 6, lines 60-64, Bentley) and administrator (see col. 23, lines 29-36, Bentley); and automatically updating related data (see col. 9, lines 31-45, Bentley discloses a system for collaborative engineering having a plurality of asset team members each using a variety of tools or programs for collaborative projects).

Bentley, however, does not disclose that the related hydrocarbon-producing portfolio data. Armitage, on the other hand, discloses system for evaluating seismic sequence lithology and property with predicting potential hydrocarbon reservoir and hydrocarbon data in databases (col. 4, lines 57-66; col. 5, lines 7-14 and col.7, lines 44-46, Armitage). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use Cwenar's information management system with Armitage's hydrocarbon-producing data or any

kind of data. One would have been motivated to use this type of system with hydrocarbon-producing portfolio data in order to maintain an up-to-date database for this area.

Bentley and Armitage combination does not disclose the initiation of portfolio data. Sperandeo discloses investment data having interrelated assets including initiating portfolio and creating portfolio's performance (summary and ¶[0029]-[0034], Sperandeo). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the created portfolio data of Sperandeo into the combination system of Bentley and Armitage to derive the invention as claimed. The motivation of doing so would have been used the inputted portfolio data, accumulated data and created portfolio out of it in order to maintain an up-to-date database for this area.

Regarding claim 29, Bentley/Armitage/Sperandeo combination discloses a seismic interpretation application and a petroleum land management application and a drilling engineering application, and a portfolio optimization application (see col. 4, lines 57-66 and col. 5, lines 7-14; Fig. 3 and Fig. 20, Armitage).

Regarding claims 30 and 35, Bentley/Armitage/Sperandeo combination further discloses that at least one business process model to select ones of the corresponding data to generate modeled data (see col. 19, lines 58-62, Lu and col. 4, lines 57-66; col. 5, lines 7-14 and col. 7, lines 44-46, Armitage).

Regarding claim 31, Bentley/Armitage/Sperandeo combination further discloses that at least one business process model comprises determining an optimized drilling schedule (see col. 7, lines 42-44 and col. 11, lines 48-58, Armitage).

Regarding claim 32, Bentley/Armitage/Sperandeo combination further discloses that at least one selected from product price forecasts and production predictions (see col. 6, lines 62-67, Armitage).

Regarding claim 33, Bentley/Armitage/Sperandeo combination further discloses that at least one selected from developing most profitable assets first, achieving a selected net cash flow, achieving a selected earnings, achieving a selected level of production, satisfying obligations on time, and developing assets to achieve the greatest net cash flow in a selected amount of time for a selected amount of capital (see col. 4, lines 1-14, Armitage).

Regarding claim 34, Bentley/Armitage/Sperandeo combination further discloses that at least one business process model comprises forecasting hydrocarbon production (see Fig. 3 and col. 2, lines 61-67, Armitage).

Regarding claim 36, Bentley/Armitage/Sperandeo combination further discloses that at least one business process model comprises determining drilling costs associated with at least one prospectively drilled well (see col.3, lines 1-7, Armitage).

Regarding claim 37, Bentley/Armitage/Sperandeo combination further discloses that the hydrocarbon-producing portfolio comprises existing and prospective well locations, petroleum land management information related to the existing and an prospective well locations, capital equipment disposed in the existing wells, capital equipment proposed for existing and prospective wells, and estimated hydrocarbon reserves in reservoirs penetrated by the existing and prospective wells (see col.7, lines 42-44, Armitage).

Regarding claims 38-40, Bentley/Armitage/Sperandeo combination further discloses that the notifying at least one of the asset team members that corresponding data used by the one of

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the applications used by the at least one asset team member have been updated by operation of the other one of the applications used by at least one other asset team member (see col. 9, lines 31-45, Bentley).

Claims 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cwenar (U. S. Patent no. 5,893,079) or record in view of Armitage (U. S. Patent no. 5,475,589) of record and further view of Myers Jr. et al. (US 6,959,268 B1).

Regarding claims 42-44, Bentley/Armitage combination discloses all of the claimed limitations as discussed above, except wherein only one of the multiple users is allowed to access data relating to the property at a time.

Myers discloses a collaborative engineering environment that allows a user to access to a tool and update data in a database and immediately be available to the other users (see Fig.3; col.6, line 58 to col.7, line 6, Myers). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Cwenar/Armitage to include the claimed feature as taught by Myers. The motivation of doing so would have been to transmit the updated information to the users immediately (col.6, line 58 to col.7, line 6, Myers).

#### **(10) Response to Argument**

**A. Rejections under 35 U.S.C. §103(a) of claims 1-7, 15-27 and 41 as obvious over Cwenar in view of Armitage are proper.**

**1. The combination of Cwenar and Armitage discloses all the elements of independent claims 1, 15 and 21 and their respective dependent claims.**

**Examiner's response to Appellant's argument a.**

**a. Cwenar and Armitage combination teach or suggest updating the database in real-time.**

Appellant's argument asserting for the patentability of the claimed invention over Cwenar and Armitage basically alleges two defects in these references of record. In particular, in supportive of the allegation, appellant insists that neither Cwenar nor Armitage teaches updating record in "real-time". In the alternate argument, appellant seems to allege that the impropriety arisen from combining two non-analogous art.

The examiner completely disagrees with the alleged defects in view of the following counter remarks.

With respect to updating record in "real-time", the examiner asserts that the environment in which Cwenar's teaching is intended for clearly requires "real-time" record updating, so as to keep multiple users consistent in managing their financial records. It is still the examiner's position that updating record such as pointed in lines 43-56, column 5 in Cwenar is clearly done in "real-time", otherwise the financial records kept by the system would render inaccuracies to multiple users. In short, the environment in which Cwenar intends must be done through "real-time" to avoid errors created in the records.

In giving the argument for patentability based on the term, "real-time" a different perspective, the examiner finds it to be weak, as the term itself lacks structurally boundary that would clearly distinguish it from both Cwenar and Armitage. The term, "real-time" remains so broad that the intended breadth of coverage could be construed as the very concept offered by Cwenar and Armitage.

With respect to the alternate argument asserted, the examiner also disagrees. Mainly because the concept of updating record in “real-time” to keep multiple users in synch is critical to the success of any multi-accessible system. Even though the environment intended by Cwenar is directed to financial record keeping, nonetheless, it does support the concept of real-time record updating.

In supportive of rejecting Cwenar in view of Armitage, the examiner asserts that Armitage does elaborate in detail the importance of standardizing and maximizing the efficiency of sharing hydrocarbon production data between multiple users. The examiner construed from the concept conveyed by Armitage that the accuracy of hydrocarbon portfolio is critical in minimizing unnecessary geologically drillings. As such Armitage’s concept does lend support for the need to updating hydrocarbon data in “real-time”.

Given the record manageability offered by Cwenar and the advantage of having accurate hydrocarbon data mentioned in Armitage, one of ordinary skill in the art would have considered it obvious to expand the operability of Cwenar in fulfilling the needs for “real-time” hydrocarbon data updating motivated by the need for minimizing geological drillings.

Given the asserted motivation, it is believed the claimed invention is not patentability distinct over Cwenar and Armitage.

Appellant argues: “Neither Cwenar or Armitage teach or suggest updating the database in real-time.” (Appellant’s 4/27/07 Brief, page 10).

Examiner responds: Cwenar reference teaches a system for receiving, processing, creating, storing, updating and disseminating investment data information that multiple users



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access the server (col.2, lines 41-56; col.5, lines 44-63 and col. 8, lines 46-58, Cwenar), the updating investment data information including mutual funds, stock and mortgage (col.3, lines 56-64). Cwenar further discloses real-time interchange and communication between multiple users ("126" and "107", col.10, lines 37-51, Cwenar). And thus these updating data must be updated in real-time environment. Furthermore, the type of data being stored and updated in the database does not affect the storing, retrieving, or updating steps commonly used by database management systems. Therefore, Cwenar teach a system of creating, storing, updating and sharing data in real time by multiple users and a plurality of different programs (abstract; summary; col.4, lines 4-29, col.5, lines 44-63 and col.6, lines 36-44, Cwenar).

**Examiner's response to Appellant's arguments 1b, 1b 1g and 2:**

**b. Cwenar and Armitage combination teach or suggest generating hydrocarbon-producing portfolio data tied to a key parameter field.**

Appellant argues: "the combination of Cwenar and Armitage does not discloses, teach or suggest generating hydrocarbon-producing portfolio data tied t a key parameter field."

(Appellant's 4/27/07 Brief, page 17).

In response to appellant's argument that the references fail to disclose certain features of applicant's invention, it is noted that the language of the limitations in claim 1 can be given broad and reasonable interpretation. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

As described in the rejection above, Cwenar clearly discloses at (FIG. 4) an information management system, comprising: a data repository (101, Fig.4, Cwenar) storing portfolio data

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tied to a key parameter field (FIG. 6; col. 7, lines 21-27; col.8, lines 21-23 and col. 13, lines 19-60, Cwenar); and at least one application server (100) adapted to provide a plurality of applications (column 6, lines 36-39) to a plurality of users (126, 128, 130, 132, 134, 136, 138 and 140), the at least one application server (100) operatively coupled to the data repository (101), each of the applications adapted to generate at least some data having the key parameter field (col.7, lines 21-36, Cwenar), the at least one application server (101) adapted to retrieve and update (column 5, lines 47-54 and column 6, lines 10-14, Cwenar) selected ones of the related data when ones of the applications use and generate application data having the key parameter field (see column 6, line 66 to column 7, line 3 and lines 21-36; abstract and FIG. 6 of Cwenar), the management system further updating data relating to a property in real time environment based on input from multiple users using different programs for different tasks (col.5, lines 44-63; col.6, lines 36-44 and col. 8, lines 46-58, Cwenar).

Cwenar, however, does not disclose that the data in the database pertains to related hydrocarbon-producing portfolio data, the steps above could be used with databases storing any kind of data, to include hydrocarbon-producing portfolio data. Furthermore, the type of data being stored and updated in the databases does not affect the storing, retrieving, or updating steps commonly used by database management systems.

Armitage, the related art, is used as a secondary reference for the teaching of hydrocarbon-producing data. Armitage discloses system for evaluating property with predicting potential hydrocarbon reservoir and hydrocarbon data (col. 4, lines 57-66; col. 5, lines 7-14 and col.7, lines 44-46, Armitage).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use Cwenar's information management system with Armitage's hydrocarbon-producing data or any kind of data. One would have been motivated to use this type of system with hydrocarbon-producing portfolio data in order to maintain an up-to-date database for this area. Thus the combination of Cwenar and Armitage discloses the claimed invention.

**Examiner's response to Appellant's argument c:**

**c. Cwenar and Armitage combination teach or suggest a data repository including hydrocarbon-producing portfolio data**

The applicant argued that the combination of the references would not suggest to one skilled in the art to obtain the claimed invention.

Examiner believes that the motivation was given above to combine **Cwenar and Armitage** is sufficient. In addition, Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Appellant repeats his earlier argument "the combination of Cwenar and Armitage does not disclose or suggest a hydrocarbon-producing portfolio" (Appellant's 4/27/07 Brief, page 18).

The examiner reiterates her response provided above in response b.

**Examiner's response to Appellant's argument d:**

**d. Cwenar and Armitage combination teach or suggest using applications selected**

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**from a database management application of portfolio management application, and of portfolio forecast application.**

Cwenar clearly discloses database management system to cooperatively develop applications (col.6, lines 37-41 and col.7, lines 7-20) and update data (column 5, lines 47-54 and column 6, lines 10-14, Cwenar) and therefore these applications must be used or selected.

**Examiner's response to Appellant's arguments e and f:**

**Cwenar and Armitage combination discloses creating an optimized drilling schedule.**

Cwenar clearly discloses a system of creating, storing, updating and sharing data in real time by multiple users and a plurality of different programs (abstract; summary; col.4, lines 4-29, col.5, lines 44-63 and col.6, lines 36-44, Cwenar).

Armitage clearly discloses hydrocarbon producing data involving time geometric data used to prognosticate with an accuracy related to the correctness of that prognosis in drilling (col.2, lines 62-65; col.4, lines 5-14, Armitage) and thus must include creating drilling schedule.

Therefore, Cwenar and Armitage combination discloses the claimed limitation.

**B and C. Rejections under 35 U.S.C. §103(a) of claims 8-10 and 11 as obvious over Cwenar in view of Armitage and further in view of Dembo or O'shaughnessy are proper.**

**Examiner's response to Appellant's arguments B, C and D.**

Appellant relies on his earlier argument that the combination of Cwenar and Armitage would not have been obvious in challenging this further combination in view of Dembo. Hence, because the Appellant does not further distinguish the claimed invention over the

Cwenar/Armitage/Dembo combination, the examiner reiterates her response provided above and incorporates it by reference.

**E. Rejections under 35 U.S.C. §103(a) of claims 28-40 as obvious over Bentley in view of Armitage and further in view of Sperandeo are proper.**

**Examiner's response to Appellant's argument E**

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Bentley discloses a method for managing a portfolio, comprising: having a plurality of asset team members each using an application related to a function of the respective asset team member to generate data; the asset team members (see col. 5, lines 44-63, Bentley) comprising engineers (see col. 5, lines 44-50 and col. 6, lines 60-64, Bentley) and administrator (see col. 23, lines 29-36, Bentley); and automatically updating related data (see col. 9, lines 31-45, Bentley discloses a system for collaborative engineering having a plurality of asset team members each using a variety of tools or programs for collaborative projects).

Armitage, the related art, is used as a secondary reference for the teaching of hydrocarbon-producing data in databases (col. 4, lines 57-66; col. 5, lines 7-14 and col. 7, lines 44-46, Armitage). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use Cwenar's information management system with

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Armitage's hydrocarbon-producing data or any kind of data. One would have been motivated to use this type of system with hydrocarbon-producing portfolio data in order to maintain an up-to-date database for this area.

Sperandeo, the related art, is submitted for the disclosure of the initiation of portfolio data. Sperandeo discloses investment data having interrelated assets including initiating portfolio and creating portfolio's performance (summary and ¶[0029]-[0034], Sperandeo). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the created portfolio data of Sperandeo into the combination system of Bentley and Armitage to derive the invention as claimed. The motivation of doing so would have been used the inputted portfolio data, accumulated data and created portfolio out of it in order to maintain an up-to-date database for this area. Therefore, the combination of Bentley/Armitage and Sperandeo is proper and the combination discloses the claimed invention.

**Examiner's response to Appellant's arguments a-d.**

Appellant repeats his earlier argument "none of the three references discloses a hydrocarbon portfolio management system" (Appellant's 4/27/07 Brief, page 33).

The examiner reiterates her response provided above in response E.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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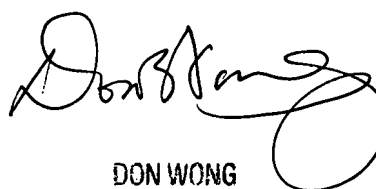
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